Paper No. 30

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte KENJI SAITO

Appeal No. 2000-1289
Application No. 08/604,829

ON BRIEF

Before THOMAS, FLEMING, and BARRY, *Administrative Patent Judges*.

BARRY, *Administrative Patent Judge*.

DECISION ON APPEAL

The examiner rejected claims 6, 7, and 9-11. The appellant appeals therefrom under 35 U.S.C. § 134(a). We reverse.

BACKGROUND

The invention at issue in this appeal relates to controlling magnetic storage devices. Digital compression of visual and audio signals enables such signals to be processed by a computer and stored by the computer's magnetic storage

device. When the processing of a prescribed amount of data is not completed in a certain time, however, reproduction of a resulting image or a sound is impeded. A high-speed magnetic storage device is required to solve this problem.

The appellant's invention switches between two memory groups having the same structure so that the two groups are used alternately. As shown in Figure 1 of the appellant's specification, the first memory group (10) and the second memory group (11) each comprise a number of memory devices (101-106 and 111-116, respectively) equal to a number of magnetic disk communication means (4-9). A switch (12) enables connection between one of the first and second memory groups and the magnetic disk communications means and also between the other one of the memory groups and an external communication means (2). When the memory devices in one of the two memory groups communicate with the magnetic disks, the memory devices in the other group communicate with the external equipment, and vice versa. Such an arrangement permits parallel processing of data at a high speed.

Claim 11, which is representative, follows:

11. An information storage controller for controlling a reading and writing of information to and from a plurality of magnetic disks and an external equipment, said controller comprising:

an external communication means for communicating information with the external equipment;

a plurality of magnetic disk communication means for communicating information with the plurality of magnetic disks;

a first group of memory devices comprising a plurality of memory devices equivalent in number to said plurality of magnetic disk communication means;

a second group of memory devices comprising a plurality of memory devices equivalent in number to said plurality of magnetic disk communication means;

a switch means for enabling connection alternately between (a) and (b):

(a) said second group of memory devices and said magnetic disk communication means and between said first group of memory devices and said external communication means; and

(b) said first group of memory devices and said magnetic disk communication means and between said second group of memory devices and said external communication means;

wherein each of said plurality of magnetic disk communication means is alternately connected to one of aid plurality of memory devices from said first group of memory devices and to one of said plurality

of memory devices from said second group of memory devices; and

a switch controller for controlling said switch means so as to enable communication alternately between (a) and (b):

(a) said second group of memory devices and said magnetic disk communication means and between said first group of memory devices and said external communication means; and

(b) said first group of memory devices and said magnetic disk communication means and between said second group of memory devices and said external communication means.

The prior art applied by the examiner in rejecting the claims follows:

Asfour 5,182,801 Jan. 26, 1993

Farr 5,088,081 Feb. 11, 1992.

Claims 6, 7, and 9-11 stand rejected under 35 U.S.C. § 103(a) as obvious over Asfour in view of Farr.

OPINION

After considering the record, we are persuaded that the examiner erred in rejecting claims 6, 7, and 9-11. Accordingly, we reverse.

Rather than reiterate the positions of the examiner or appellant *in toto*, we address the main point of contention there between. The examiner asserts, "Asfour clearly teaches two distinct groups, although the Asfour device has significantly more flexibility." (Examiner's Answer at 8.) He explains, "Asfour teaches one group of memory connected to the devices 10 and 11 and another distinct group simultaneously connected to the external device 90 (see Asfour, column 8, line 53-column 9, line l2). Asfour's groups are 'virtual' groups in that any of the individual memories 70-73 may be connected to any of the devices 10, 11 or 90. . . ." (*Id.*) The appellant argues, "while the Asfour reference does in fact teach a single memory pool 55 comprising a plurality of memory banks each of which may be accessed by either of device 10 or device 11 shown in Figure 1 of the Asfour reference, it is quite clear that the Asfour reference

does not disclose, teach, or render obvious *a first group of memory devices 10 and a second group of memory devices 11*. . . ." (Appeal Br. at 5.)

In deciding obviousness, "[a]nalysis begins with a key legal question -- *what* is the invention *claimed*?" *Panduit Corp. v. Dennison Mfg. Co.*, 810 F.2d 1561, 1567, 1 USPQ2d 1593, 1597 (Fed. Cir. 1987). Here, independent claim 11 specifies in pertinent part the following limitations: "a first group of memory devices comprising a plurality of memory devices equivalent in number to said plurality of magnetic disk communication means; a second group of memory devices comprising a plurality of memory devices equivalent in number to said plurality of magnetic disk communication means; a switch means for enabling connection alternately between (a) and (b): (a) said second group of memory devices and said magnetic disk communication means and between said first group of memory devices and said external communication means; and (b) said first group of memory devices and said magnetic disk communication means and between said second group of memory

devices and said external communication means enabling connection alternately between (a) and (b): (a) said second group of memory devices and said magnetic disk communication means and between said first group of memory devices and said external communication means; and (b) said first group of memory devices and said magnetic disk communication means and between said second group of memory devices and said external communication means. . . ." Accordingly, the claim requires switching between two groups of memories having the same structure so that the two groups are used alternately.

Having determined what subject matter is being claimed, the next inquiry is whether the subject matter is obvious. "In rejecting claims under 35 U.S.C. Section 103, the examiner bears the initial burden of presenting a *prima facie* case of obviousness." *In re Rijckaert*, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993)(citing *In re Oetiker*, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992)). "'A *prima facie* case of obviousness is established when the teachings from the prior art itself would appear to have suggested the

claimed subject matter to a person of ordinary skill in the art.'" *In re Bell*, 991 F.2d 781, 783, 26 USPQ2d 1529, 1531 (Fed. Cir. 1993) (quoting *In re Rinehart*, 531 F.2d 1048, 1051, 189 USPQ 143, 147 (CCPA 1976)).

Here, Asfour teaches only one group of memories. Specifically, "memory pool 55 is made up of a number of memory ports 60, 61, 62 and 63. Each of these memory ports 60-63 contains a single memory bank." Col. 3, ll. 59-61. Within the group, one memory bank may be connected to one processing or data acquisition device at a time. Specifically, "data acquisition device 90 will load memory bank after memory bank, as it acquires data. As one memory bank 70 is filled, the data acquisition device 90 will be connected to a different memory bank 71 so that
it can load that memory bank." Col. 9, ll. 4-8. "The processing device 10 will be connected to the memory bank 70 after the memory bank 70 has been filled by the data acquisition device 90. The device 10 can then process the

information in the memory bank 70 at its own speed." *Id.* at ll. 8-13.

Relying on Farr merely to "teach[] a disk storage system which operates in a RAID level 5 mode," (Examiner's Answer at 6), the examiner fails to allege, let alone show, that the secondary reference cures the defect of the primary references. Therefore, we reverse the rejection of independent claim 11 and of claims 6, 7, 9, and 10, which depend therefrom.

CONCLUSION

In summary, the rejection of claims 6, 7, and 9-11 under § 103(a) is revered.

REVERSED

JAMES D. THOMAS Administrative Patent Judge	)	
MICHAEL R. FLEMING Administrative Patent Judge	)	BOARD OF PATENT APPEALS AND INTERFERENCES
LANCE LEONARD BARRY Administrative Patent Judge	)	

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APJ FLEMING

APJ THOMAS

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Prepared By: APJ BARRY

DRAFT SUBMITTED: 10 Sep 02

FINAL TYPED:

Team 3:

I typed all of this opinion.

Please proofread spelling, cites, and quotes. Mark your proposed changes on the opinion, but **do NOT change matters of form or style. I will include the diskette with the signed copy so that you can make all changes before mailing.**

For any additional reference provided, please prepare PTO 892 and include copy of references

Thanks,
Judge Barry